LED Studio 3300T
LED Studio 3300D
LED Studio 3305T
LED Studio 3305D

This product manual contains important information about the safe installation and use of this projector. Please read and follow these instructions carefully and keep this manual in a safe place for future reference.

PR LIGHTING LTD.
http://www.pr-lighting.com

INDEX

SAFE USAGE OF THE PROJECTOR	3
INSTALLING THE PROJECTOR	4
CONTROL CONNECTION	5
DMX TERMINATOR	5
SETUP OPTIONS-PROJECTOR CONFIGURATION	6
TO SET THE DMX START ADDRESS	6
OPERATION MENU	7
DMX PROTOCOL	8
INDICATION OF LED DIGITAL TUBE	9
MAINTENANCE	9
TROUBLESHOOTING	9
TECHNICAL DATA	10
ELECTRICAL DIAGRAM	12
COMPONENT ORDER CODES	14

Please note that as part of our ongoing commitment to continuous product development, specifications are subject to change without notice. Whilst every care is taken in the preparation of this manual we reserve the right to change specifications in the course of product improvement. The publishers cannot be held responsible for the accuracy of the information herein, or any consequence arising from them.

Every unit is tested completely and packed properly by the manufacturer. Please make sure the packing and / or the unit are in good condition before installation and use. Should there be any damage caused by transportation, consult your dealer and do not use the unit. Any damage caused by improper use will not be assumed by the manufacturer and / or dealer.

ACCESSORIES

These items are packed together with the projector:

Name	Quantity	Unit	Remark
Clamp	1	Pc	
Safety cord	1	Pc	
Allen key	1	Pc	4MM
XLR cable	1	Pc	With female and male sockets
Power cord	1	Pc	
This manual	1	Pc	

SAFE USAGE OF THE PROJECTOR

When unpacking and before disposing of the carton, check there is no transportation damage before using the projector. Should there be any damage caused by transportation, consult your dealer and do not use the apparatus.

The projector can be used indoors and outdoors, IP20.

The projector is not designed or intended to be mounted directly on to inflammable surfaces.

The projector is only intended for installation, operation and maintenance by qualified personnel.

Do not project the beam onto inflammable surfaces, minimum distance is 2m. ◁ 2m ∈

Avoid direct exposure to the light from the lamp. The light is harmful to eyes.

Do not attempt to dismantle and/or modify the projector in any way.

Electrical connection must only be carried out by qualified personnel.

Before installation, ensure that the voltage and frequency of power supply match the power requirements of the projector.

It is essential that each projector is correctly earthed and that electrical installation conforms to all relevant standards.

Do not connect this device to any other types of dimmer apparatus.

Make sure that the power-cord is never crimped or damaged by sharp edges. Never let the power-cord come into contact with other cables. Only handle the power-cord by the plug. Never pull out the plug by tugging the power-cord.

When the projector is hanged to a high place, please use a safety cord provided to pass through the projector handles as a secondary safety fixing for safety seasons. For details, refer to “INSTALL THE PROJECTOR “section.

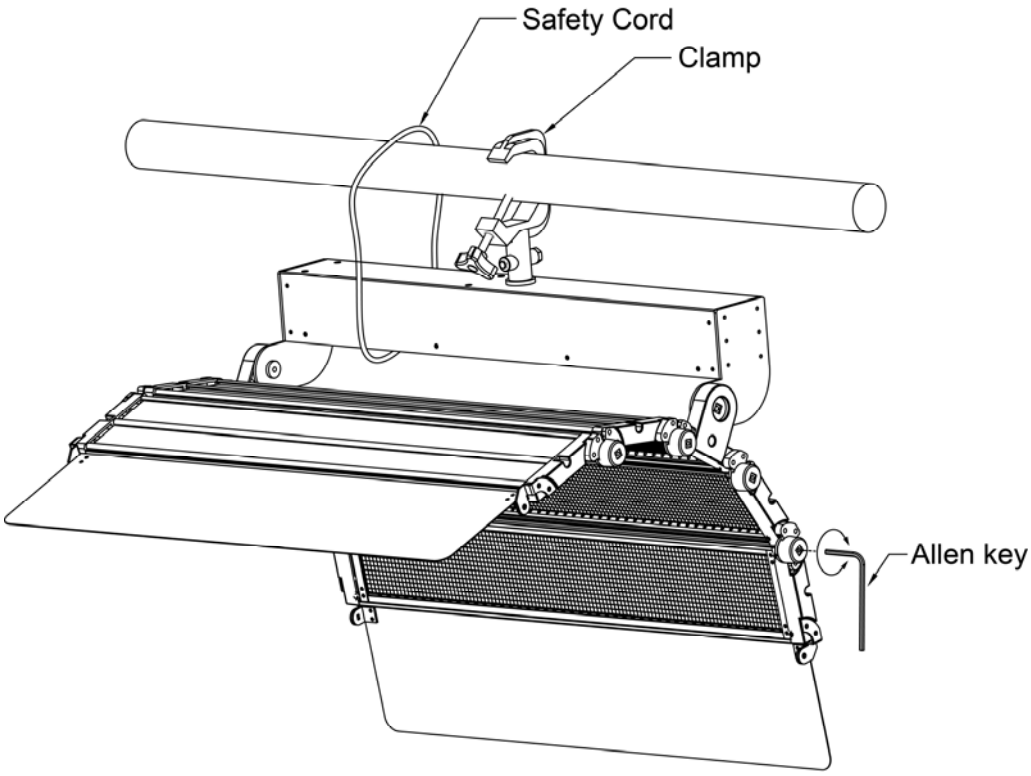
Exterior surface temperatures of the projector after 5 minutes’ operation is 45℃, when achieving steady state it is 55℃.

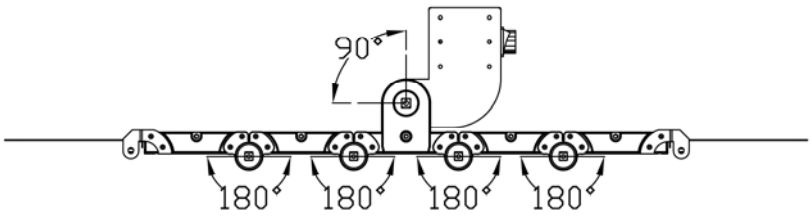
There is no user serviceable parts inside the projector, do not open the housing and never operate the projector with the covers removed.

Always disconnect from the mains, when the device is not in use or before cleaning it or before attempting any maintenance work !

If you have any questions, don’t hesitate to consult your dealer or manufacturer.

INSTALL THE PROJECTOR





The unit hanging installation, not suitable for side hanging installation
The unit was designed to make installation easy: it can be rotated within 90° manually; its two side panels can be rotated within 180° manually.

Take 1 clamps and 1 safety cord out from the package and mount 1 clamp on the mounting ring of fixture with 1 retainer. Hang the fixture on the structure and fasten the screws attached to the clamp. Always ensure that the projector is firmly anchored to avoid vibration and slipping whilst functioning. Always ensure that the structure to which you are attaching the projector is secure and strong enough to support the weight of the fixture. For safety the projector should have a secondary fixing with a safety cord through the handle of the unit to ensure safe mounting. The tightness between the two light panels can be adjusted by the Allen key supplied.

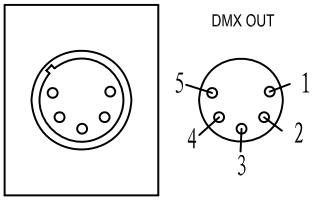
Warning:

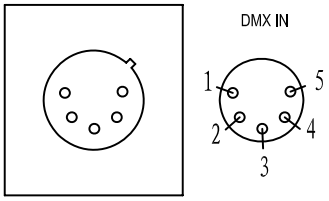
1. The projector MUST be lifted or carried by the HANDLES instead of clamps.

2. For safety the safety cord should afford 10 times of the unit's weight.

CONTROL CONNECTION

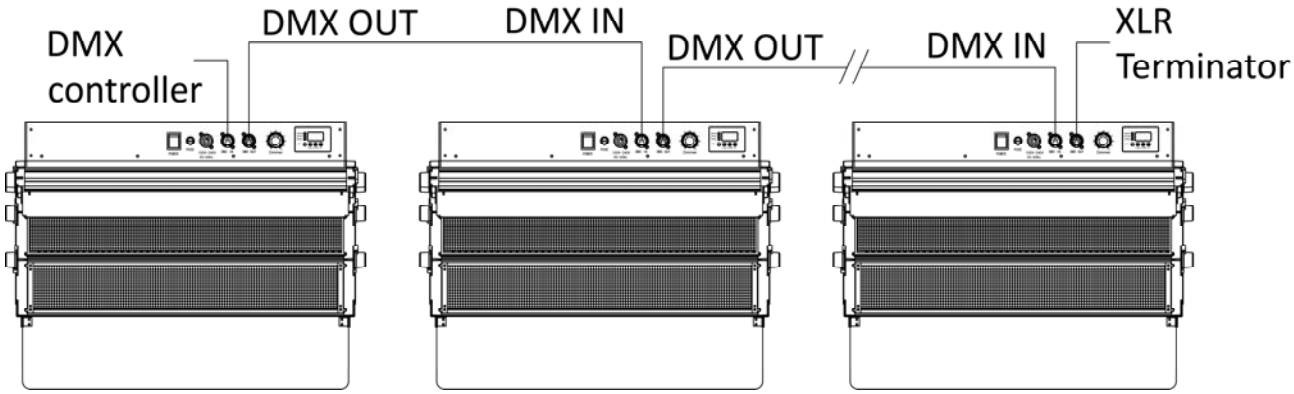
5-PIN





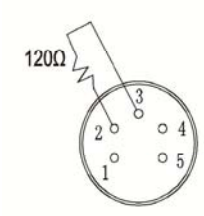
DMX 512	
PIN	FUNCTION
1	GND
2	DATA-
3	DATA+
4	N/C
5	N/C

Connection between the controller and a projector and between one projector and another must be made with a 2 core-screened cable, with each core having at least a 0.5mm diameter. Please use the projector's cannon 5- pin signal input and output cables as connection. The 5-pin signal connections are connected as shown in the figure above.
Note: Care should be taken to ensure that none of the pins touch the metallic body of the plug or each other. The body of the plug is not connected in any way. The projector accepts digital control signals in protocol DMX512 (1990).
Connect the controller's output to the first fixture's input, and connect the first fixture's output to the second fixture's input and connect the rest fixtures in the same way. Eventually connect the last fixture's output to a DMX terminator as shown in the figure below.
Each unit should be connected to power supply individually and the voltage and frequency of the power supply should match those indicated on nameplate.



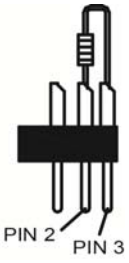
DMX TERMINATOR

In the Controller mode, at the last fixture in the chain, the DMX output has to be connected with a DMX terminator. This prevents electrical noise from disturbing and corrupting the DMX control signals.
The DMX terminator is simply an XLR connector with a 120Ω (ohm) resistor connected across pins 2 and 3, which is then plugged into the output socket on the last projector in the chain. The connections are illustrated below.

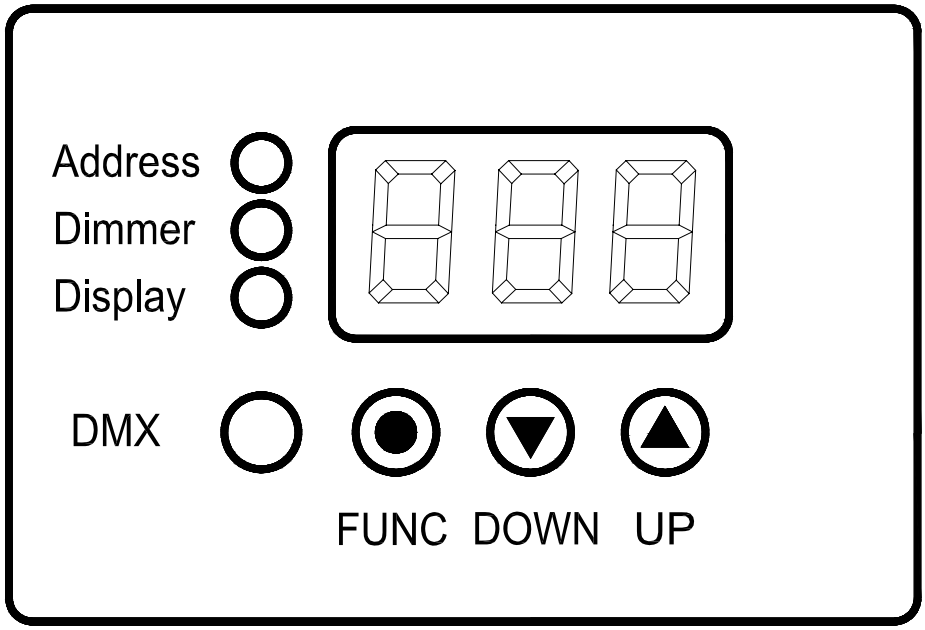


DMX TERMINATOR CONNECTION

Connect a 120Ω(OHM) resistor across pins 2 and 3 in an DMX plug and insert into the DMX OUT socket on the last unit in the chain.



SETUP OPTIONS-PROJECTOR CONFIGURATION



Projector configuration can be set conveniently via push-button switch and LED display.
Launch the projector and press button FUNC for more than 3 seconds to unlock the panel, the LED will show the function menu of the projector, each main menu has its submenus and each submenu has a specific function. For details, please see the "OPERATION MENU" section.
Press button FUNC if you want to browse through the various Setup Options.
Press button FUNC to save your settings or enter the next menu. Press button UP or DOWN to shift.
Press button FUNC, it will return to the main menu or browse through the main menu.
Without any operations after 3minutes, the LED display will be locked.

TO SET THE DMX START ADDRESS

Each projector must be given a DMX start address so that the correct projector responds to the correct control signals. This DMX start address is the channel number from which the projector starts to "listen" to the digital control information being sent out from the controller. The projector has 1 DMX channel, so set the No. 1 projector's address 001, No. 2 projector's address 002, No. 3 projector's address 003, and so on.
Launch the projector. Press button FUNC for more than 3 seconds to unlock the panel.
Press button FUNC to find "AddR" menu.
Then press FUNC to show DMX address and press UP or DOWN to set DMX address.
At this time, DMX address will flash continuously. Press button FUNC to confirm and it means the setting has been enabled. (Note: Re- Power the fixture more than 3 seconds after it is switched off.)
Press button FUNC, it will return to the main menu.

Operations Menu

1st level menu	2nd level menu
Add DMX Address	XXX （001~512）
tES Test Mode	000-255
dSP Information	_ON Address displayed after LED display locked
	OFF Black LED display after it locked

DMX PROTOCOL

CHANNEL	FUNCTION	DMX	DESCRIPTION
1	Dimmer	000-255	Dimming from dark to light

Manual Potentiometer Dimmer : Rotate the potentiometer from dark to bright(000~255)

Manual Potentiometer Dimmer is prior to DMX Dimmer, Potentiometer @0 is the point to change between the two modes. Only Manual Potentiometer @0 can DMX Dimmer work, otherwise ,DMX Dimmer won't work.

Priority sequence: Potentiometer>Digital Control Panel>DMX Dimmer

While Potentiometer @0 and TEST function selected via Digital Control Panel, Manual Dimmer through Digital Control Panel can work.

When Potentiometer @0 and ADD function selected via Digital Control Panel, DMX Dimmer can work.

INDICATION OF LED DIGITAL TUBE

Address Indication	ON	DMX Address
	Flash	DMX Address changed
Dimmer Indication	ON	Brightness Value
	Flash	Brightness changed
Display Indication	ON	Setup status
	Flash	Setup changed
DMX Indication	ON	DMX Signal OK，Receiving function OK
	OFF	DMX Signal BAD，Receiving function BAD

MAINTENANCE

To prolong the life of the projector, it is very important to do the maintenance work. If the projector is idle for a long time, damp, smoke or particularly dirty surroundings can cause greater accumulation of dirt on its cover and housing. So it should be cleaned to maintain an optimum light output and at the same time to prevent it from being corrupted by acid gas.

Cleaning frequency depends on the environment in which the fixture operates. Soft cloth and typical glass cleaning products should be used for cleaning. It is recommended to clean projector at least once every 20 days.

Do not use any organic solvent, e.g. alcohol, to clean housing of the apparatus.

TROUBLESHOOTING

PROBLEM	ACTION
The projector doesn't switch on	➢ Power connection is not correct. ➢ Power supply is damaged or abnormal. Call a qualified personnel to fix it. ➢ Connection of control board is not correct. Call a qualified personnel to fix it.
The projector can be turned on, but LEDs do not emit light and are out of control.	➢ Connection of LED board is not correct. Call a qualified personnel to fix it.
The lamp comes on but the projector doesn't respond to the controller	➢ Make sure that the projector is correctly configurated. ➢ Replace or repair the DMX cable.
The beam appears dim	➢ The projector is too hot. Take ventilation measures to make it cool.

TECHNICAL DATA

VOLTAGES:

100V-240V AC, 50/60Hz

POWER CONSUMPTION:

PR-3300T/ PR-3300D 80W@220V

PR-3305T/ PR-3305D 140W@220V

LED:

Power consumption	18W	
Quantity	5pcs	PR-3300T/ PR-3300D
	10pcs	PR-3305T/ PR-3305D
Manufacturers Rated LED Life	More than 30000 Hours	

COLOUR TEMPERATURE:

PR-3300T / PR-3305T 3200K

PR-3300D / PR-3305D 5600K

COLOUR RENDERING INDEX

Ra=93

LUMINOUS FLUX

PR-3300	2500 lm
PR-3305	5000 lm

DIMMER:

0-100% linearly adjustable

BEAM ANGLE:

Field angle(one-tenth-peak) θ

Adjustable between **90**°and 150°

CONTROL:

DMX512, 5 pin interfaces

HOUSING:

High-intensity die-casting aluminum, IP20

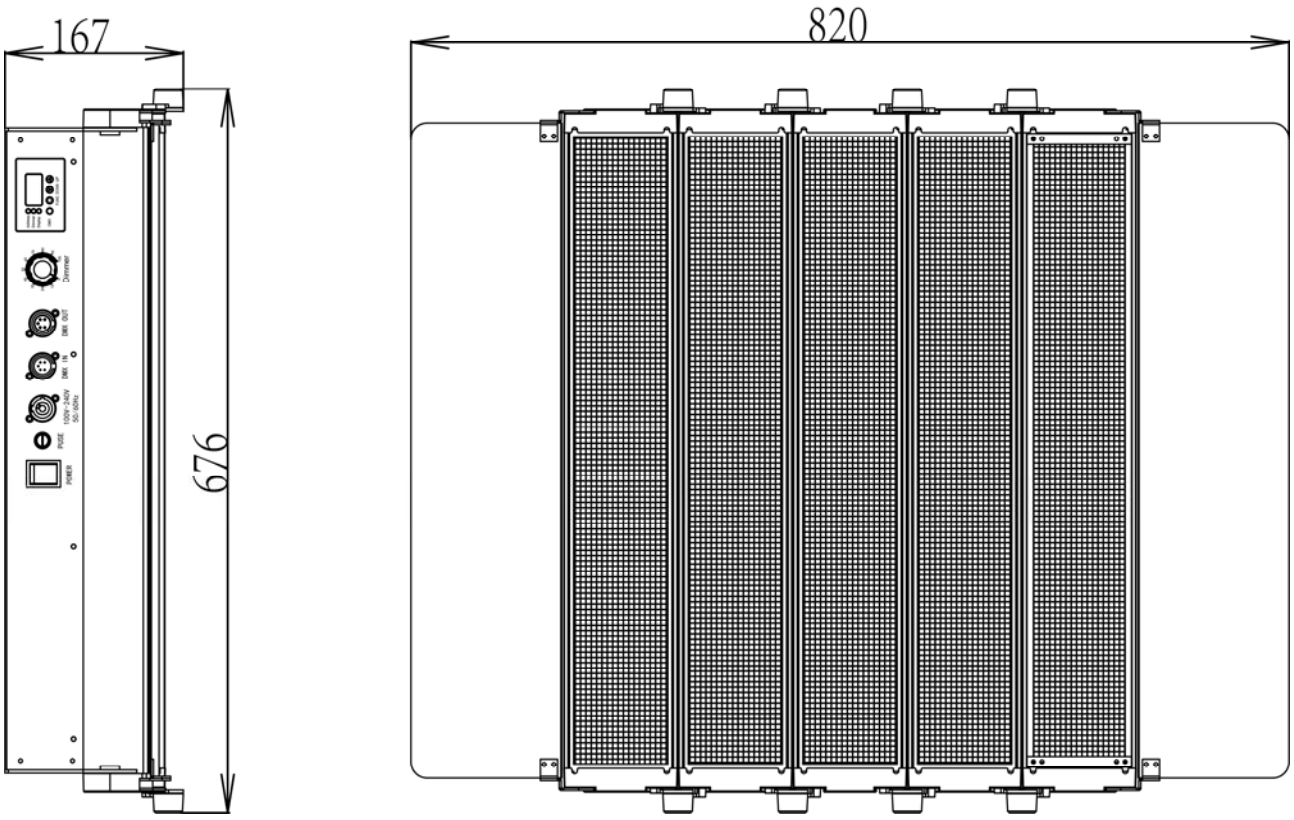
WORK ENVIRONMENT TEMPERATURE:

-20°C~40°C

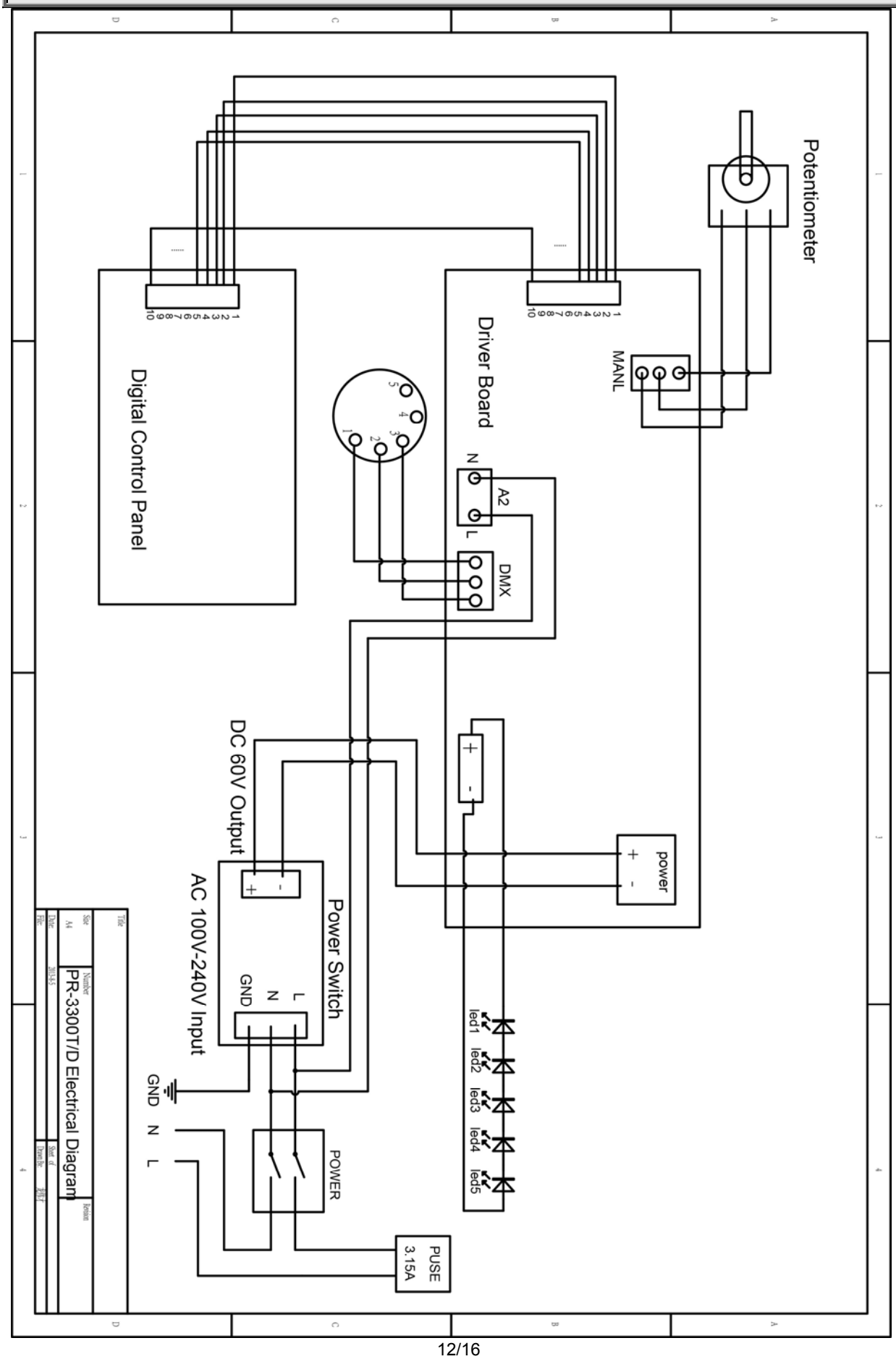
WEIGHT:

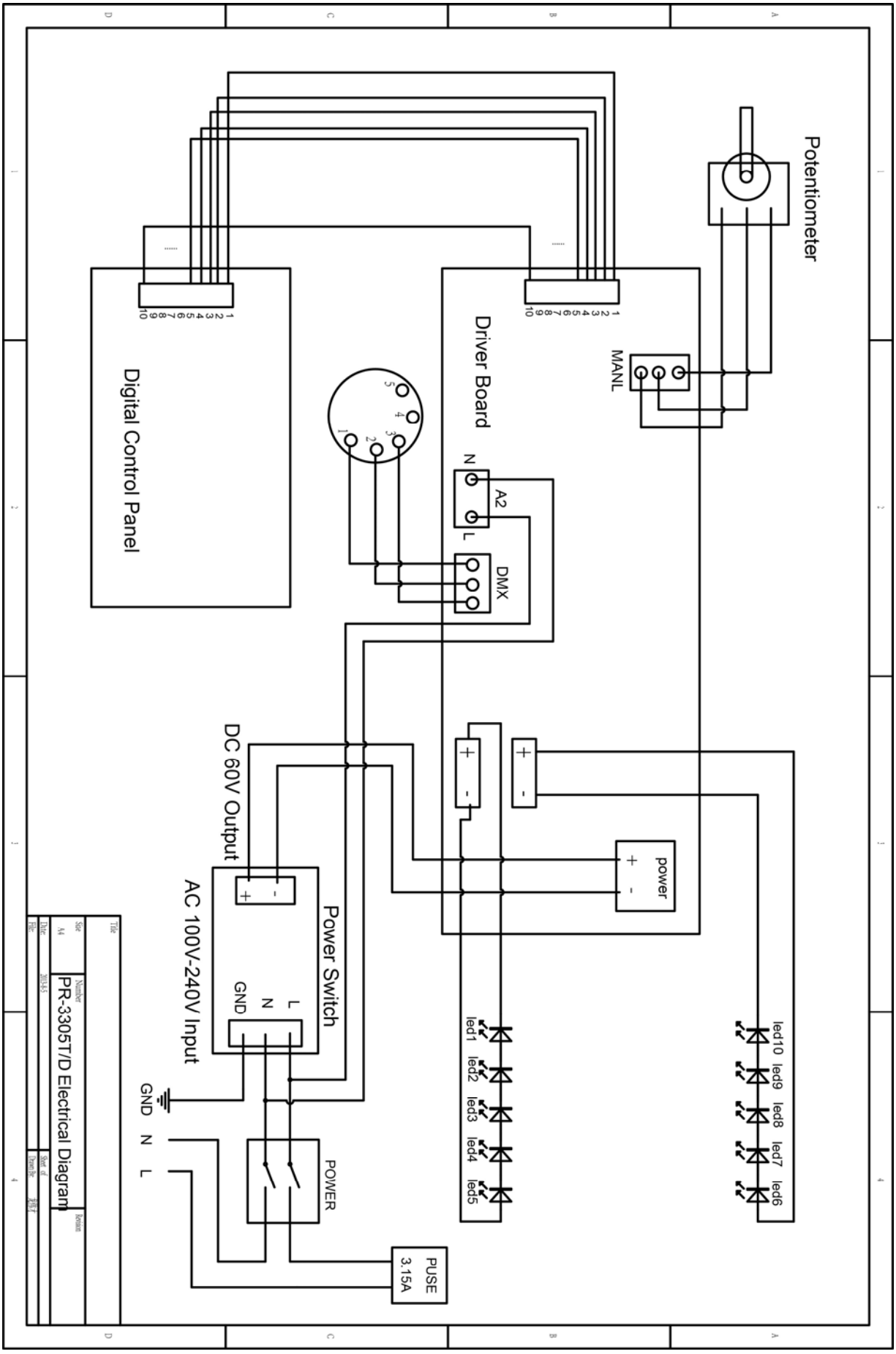
10kg

SIZES:



ELECTRICAL DIAGRAM




Potentiometer
MANL
Driver Board
Digital Control Panel
N
A2
L
DMX
DC 60V Output
AC 100V-240V Input
Power Switch
GND
N
L
power
led1
led2
led3
led4
led5
led6
led7
led8
led9
led10
GND
N
L
POWER
PUSE
3.15A
PR-3305T/D Electrical Diagram

COMPONENT ORDER CODES

NAME	PART NO.	QUANTITY	REMARK
SIGNAL MALE	212020014	1	
SIGNAL FENALE	212020015	1	
POWER CORD	120080070	1	1.5m
POWER SUPPLY	190010121	1	100-240V
LED CONTROL BOARD	230020484	1	PR-3300T/PR-3300D
LED CONTROL BOARD	230020482	1	PR-3305T/PR-3305D
LED BOARD	150020232	5	PR-3300T
LED BOARD	150020233	5	PR-3300D
LED BOARD	150020234	10	PR-3305T
LED BOARD	150020235	10	PR-3305D

PR LIGHTING LTD.

PR New Hi-tech Science Park, 1582 Xingye Avenue
Nancun Panyu, Guangzhou, 511442 China
TEL: +86-20-3995 2888
FAX: +86-20-3995 2330

P/N: 321030063A
Version: 20131022